Ohlone College

Fall Protection Plan

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TABLE OF CONTENTS

SECTION ..... **PAGE**

1.0 INTRODUCTION: 3
2.0 PURPOSE: 3
3.0 SCOPE AND APPLICATION: 3
4.0 GENERAL REQUIREMENTS: 4
4.1 THE PRACTICES, PROCEDURES AND EQUIPMENT INCLUDE BUT ARE NOT LIMITED TO: 4
5.0 REFERENCES: 4
5.1 CAL/OSHA ORDERS: 4
5.2 ANSI STANDARDS 5
6.0 RESPONSIBILITIES 6
6.1 OHLONE COLLEGE: 6
6.2 FACILITIES SAFETY COORDINATOR: (DAVID ORIAS) 6
6.3 SUPERVISORS/MANAGERS: 6
6.4 DEPARTMENTS & EMPLOYEES: 7
7.0 WALKING AND WORKING SURFACES 7
7.1 HAZARD RECOGNITION 7
7.2 HOUSEKEEPING 8
7.3 ELEVATED LOCATIONS (PLATFORM, AISLE, WALKWAY) 8
7.4 EXCAVATION 9
7.5 HOIST AREA (FORKLIFT CAGE) 9
7.6 LADDERS 9
7.7 SCAFFOLDING 10
7.8 POWERED PLATFORM 10
8.0 PERSONNEL LIFTS (scissor lifts, Fork lifts, etc.) 10
9.0 Aerial lifts 10
10.0 Other but not limited to: 11
11.0 FALL PROTECTION SYSTEMS 11

11.1 GUARDRAIL SYSTEMS....11

11.2 PERSONAL FALL POSITION/RESTRAINT/ARREST SYSTEMS 12

11.3 WARNING LINE SYSTEMS 13

11.4 CONTROLLED ACCESS ZONES 13

11.5 SAFETY MONITORING SYSTEMS....14

11.6 FALL PROTECTION MAY BE NEEDED AS FOLLOWS: 15

12.0 FALL PROTECTION TRAINING REQUIREMENTS....17
13.0 Fall Protection Training 17
14.0 Training Records....17
15.0 Fall protection Equipment inspection requirements 17

15.1 PRE-USE INSPECTION....17

15.2 COMPETENT PERSON INSPECTION....17

16.0 Fall protection equipment maintenance....18
17.0 FALL PROTECTION AND RESCUE PLANS 18

17.1 FALL PROTECTION PROCEDURES....18

18.0 Rescue Plans – Ohlone College Policies AND WRITTEN procedures. 18

18.1 EMPLOYEE EMERGENCY ACTIONS 18

APPENDIX A – TERMS AND DEFINITIONS

APPENDIX B – INSPECITON FORMS

APPENDIX C – RESCUE PLAN PROCEDURES

APPENDIX D – FALL HAZARD ASSESSMENTS

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1.0 INTRODUCTION:

The following Fall Protection requirements compiled from Cal-OSHA, OSHA and ANSI regulations can minimize or prevent injuries, fatalities and lost workdays. Cal-OSHA recognizes that falls are generally complex events, involving a variety of factors. Consequently, this Fall Protection Program involves human and equipment related issues in protecting employees from falling off or through working levels. The key elements must be addressed in order to protect Ohlone College employees from fall hazards and include but are not limited to:

- The proper training on when and where a Fall Protection Program is required.
- The proper selection, training, use and maintenance of fall protection equipment and fall protection systems.
- The proper construction and installation of safety systems.
- The proper supervision of employees.
- The proper implementation of work procedures.

Achieving 100% fall protection begins by planning the specific work methods through a collaborative effort between managers and workers. This should include an analysis of the work task, including travel to and from the work site, and the proper selection of equipment, supplemented by initial and ongoing training, knowledgeable supervision and regular maintenance. In other words, 100% fall protection can be achieved through a complete systematic approach to each potential exposure before work begins.

It is essential to develop the habit of designing fall protection based on a complete analysis before beginning each job. Installing a fall protection system that fits the requirements of one situation may not be appropriate in another, even though the situations are apparently similar. Each work method and elevated work task should be examined thoroughly. Outside of specific personal fall arrest equipment and its anchorage, planning what to do after a fall occurs is often overlooked or left up to a "rescue" operation. Much can be done to eliminate or reduce injuries a worker may sustain in a fall, as well as employing systems that allow the worker to recover from a fall by him/herself.

2.0 PURPOSE:

This Fall Protection Program establishes and describes the procedures to be used by Ohlone College employees to provide fall protection where a hazard cannot be eliminated, set criteria and practices for fall restraint and fall protection systems and establish minimum training requirements.

3.0 SCOPE AND APPLICATION:

Occupational Safety & Health Administration (OSHA) Standard 29 CFR 1910 General Industry Safety Orders, 29 CFR 1926 Construction Safety Orders, Subpart M and California Code of Regulations (CCR) Title 8, General Industry Safety Orders and Construction Safety Orders

reference and identify areas or activities where fall protection is needed. These include but are not limited to:

- Ramps & Other Walkways;
- Excavations;
- Holes, Trenches & Drop Offs;
- Leading Edge Work;
- Unprotected Sides and Edges;
- Roofing Work;
- Wall Openings;
- Other Walking & Working Surfaces; and
- Tree Work.

4.0 GENERAL REQUIREMENTS:

CCR Title 8, Article 24, Fall Protection (Sections 1669-1672) and OSHA1926 Subpart M, Fall Protection identify the minimum standards for safe work practices and regulatory requirements for employee safety.

4.1 THE PRACTICES, PROCEDURES AND EQUIPMENT INCLUDE BUT ARE NOT LIMITED TO:

- Hazard Assessment;
- Guardrails, Covers, Parapets;
- Personal Fall Restraint/Position Systems;
- Personal Fall Arrest Systems (PFAS);
- Warning Line Systems;
- Safety Monitoring Systems;
- Controlled Access Zones.

5.0 REFERENCES:

Refer to the following current edition of the following Cal-OSHA Orders, OSHA and ANSI Standards:

5.1 CAL/OSHA ORDERS:

- CCR, Title 8, Section 1539-1547 – Excavations;
- CCR, Title 8, Section 1602 & 1603 – Work Over or Near Water;
- CCR, Title 8, Section 1620-1621 – Standard Railings;

- CCR, Title 8, Section 1626 – Ramps, Runways, Stairwells, Stairs;
- CCR, Title 8, Section 1629 – Access & Egress-Stairways and Ladders;
- CCR, Title 8, Section 1632-1633 – Floor, Roof, Wall Openings;
- CCR, Title 8, Section 1632-1633 – Scaffolds – General Requirements;
- CCR, Title 8, Section 1640-1655 – Scaffolds – Various Types;
- CCR, Title 8, Section 1658-1667 – Suspended Scaffolds;
- CCR, Title 8, Section 1669-1672 – Fall Protection;
- CCR, Title 8, Section 1675-1678 – Ladders;
- CCR, Title 8, Section 1723-1730 – Roofing Operations & Equipment;
- CCR, Title 8, Section 3209 – Standard Guardrails;
- CCR, Title 8, Section 3210 – Elevated Locations;
- CCR, Title 8, Section 3211 – Wall Openings;
- CCR, Title 8, Section 3212 – Floor Openings, Floor Holes, Roofs;
- CCR, Title 8, Section 3213 – Service Pits, Yard Surface Openings;
- CCR, Title 8, Section 3271 – Openings;
- CCR, Title 8, Section 3275 – Scaffolds;
- CCR, Title 8, Section 3276 – Use of Ladders;
- CCR, Title 8, Section 3277 – Fixed Ladders;
- CCR, Title 8, Section 3278 – Wood Ladders;
- CCR, Title 8, Section 3277 – Fixed Ladders;
- CCR, Title 8, Section 3382-3286 – General Requirements for All Window Cleaning;
- CCR, Title 8, Section 3420-3428 – Tree Work, Maintenance or Removal;
- CCR, Title 8, Section 3458 – Fall Protection for Date Palm Operations;
- CCR, Title 8, Section 3646-3648 – Elevating Work Platforms & Aerial Devices.

5.2 ANSI STANDARDS

- ANSI A10.l14.1991 – American National Standard for Construction & Demolition Operations – Requirements for Safety Harnesses, Lanyards, Lifelines;
- ANSI Z359.1-1992 (R1999) – American National Standard – Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components.

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6.0 RESPONSIBILITIES

6.1 OHLONE COLLEGE:

- Be responsible for administering the climbing and fall protection guidelines for Ohlone College employees.
- Ensure coordination and compliance with the Fall Program provisions when conducting work that requires climbing or fall protection in any/all Operations or Facilities.
- Provide training to ensure that the purpose, function, and proper use of fall protection equipment and policies are understood by employees and that the knowledge and skills required for the safe application and usage is acquired by the employees.

6.2 FACILITIES SAFETY COORDINATOR: (DAVID ORIAS)

- Identify activities on elevated areas (i.e., platforms, ladders, scaffolding, tree trimming, holiday light hanging, etc.) that require climbing, elevating, and fall protection.
- Provide and assign climbing and fall protective equipment to employees who are required to wear the equipment while working on elevated areas/surfaces.
- Make provisions to provide training to personnel who work on elevated work areas, to acquiring the understanding, knowledge, and skills necessary for the safe performance of the duties assigned as defined in California Code of Regulations (CCR), Title 8 (div. 1, subchapter 4 article 24) and 29 Code of Federal Regulations (CFR) 1910, Subpart D, Subpart F and 29 CFR 1926 Subpart M.
- Coordinate with contractors who may work on elevated work areas/surfaces.

6.3 SUPERVISORS/MANAGERS:

- Ensure the overall implementation of this Fall Protection Program is accomplished within their individual work unit.
- Ensure all employees are aware of the requirements and provisions of this program.
- Shall identify employees receive appropriate fall protection, climbing training and equipment to perform their assigned duties.
- Ensure a recordkeeping system is created and maintained within the Department(s) indicating which employees have received fall protection training.
- Shall not assign or direct an untrained and/or unauthorized employee to perform activities which require climbing or fall protection without the proper equipment and training,
- Ensure all climbers are provided with appropriate fall protection equipment.
- Ensure that employees are aware of the requirement that climbing and fall protective equipment will be properly inspected, used, and maintained.
- Ensure that Emergency Rescue and Medical Service capabilities are assessed for each site where elevated work may be performed.

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- Create Rescue Plan for each elevated work project.
- Ensure a positive means of emergency communication is available between personnel on site and the Emergency Rescue and Medical Services.
- Ensure a "competent person" (other than the user) inspects all personal fall protection equipment and safety systems every 6 months and documents the inspections.

6.4 DEPARTMENTS & EMPLOYEES:

- Wear the assigned climbing and fall protective equipment whenever required while working on an elevated work area/surface, ladder or scaffolding or when required in other operations.
- Properly inspect, use, and maintain climbing and fall protective equipment before each use.
- Notify supervisor/manager whenever fall protective equipment becomes defective and must be repaired and/or replaced and immediately remove from service any or all equipment that has been involved in a fall incident or accident.
- Never attempt any activity on an elevated work area/surface, which may be considered a fall hazard without wearing climbing and fall protective equipment.
- Never work on elevated areas for which you have not received the proper training or instruction.
- Ensure safety harnesses properly fit.
- Ensure that rescue services are available prior to working on elevated areas.
- Ensure positive means of communication is available between personnel and Emergency and Medical Services personnel prior to working on elevated areas.

7.0 WALKING AND WORKING SURFACES

7.1 HAZARD RECOGNITION

- Protecting Ohlone College employees from fall and climbing hazards begins with the identification of all potential fall hazards at each facility associated with each particular operation.
- Anytime Ohlone College employees are at a height of 4 feet or greater on unprotected sides of elevated work locations that are not buildings or building structures (8CCR 3210(b) and/or 7 ½ feet or greater, a fall hazard exists off of perimeters, edges, sides, slopes, etc. of structures (8CCR 1670(a)). Ohlone College employees shall be protected from fall hazards by providing guardrails or other appropriate fall barriers, or by providing employees with the appropriate personal protective equipment (PPE), and the necessary training to safely conduct work operations.
- This program applies to all employees that do or may work at heights of the 4 feet and/or 7.5 feet or more requirements identified above. Fall protection/arrest must be utilized,

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within the requirements of this program, regardless of the duration or nature of the work. Fixed installed guardrails meeting applicable standards shall be the primary element in fall protection. Guardrails shall be maintained in proper condition. Engineering controls shall be implemented where feasible to reduce employee hazards to falls. When conducting a fall hazard assessment(s), personnel shall select equipment and employ measures that present the greatest protection in preventing a potential fall. This fall hazard assessment shall also consider the effects of a fall and select equipment that will best protect the employee in the event of an actual fall.

- Ohlone College employees are directed to access elevated working locations using an approved and secured proper height/capacity pre-use inspected in accordance with manufacturers instruction/specifications as identified on a legible label located on the ladder rail, OR
- Ohlone College employee's use of an aerial lift, bucket truck, scissor lift, etc. to access the implementation and use of personal fall protection equipment from elevated leading edge locations.

7.2 HOUSEKEEPING

Inadequate housekeeping in facilities may result in bodily injury. Accidents associated with housekeeping may occur due to slip, trip, and fall hazards. General safety requirements include:

- Walking and working surfaces should be at least 18 inches wide.
- Floors and walking surfaces shall be kept free of debris and clutter.
- Floors and walking surfaces shall be kept free of protruding nails, splinters, holes, or loose boards.
- No obstructions or equipment across passageways shall be allowed.

7.3 ELEVATED LOCATIONS (PLATFORM, AISLE, WALKWAY)

- Walking and working surfaces should be at least 18 inches wide, stable and reasonably free of tripping hazards.
- Every effort shall be made to ensure all temporary platforms/walkways are secured and equipped with solid decks free of openings and standard guardrail systems and temporary work platforms or walkways must be provided with at safe means of access/egress, which allows personnel to remain tied off at all times. Retractable lifelines or other approved fall protection equipment and procedures shall be used to achieve fall protection while ascending or descending access ladders to temporary platforms or walkways.
- All personnel engaged in **unguarded** work at elevations at or above 4 feet and/or 7.5 feet shall be provided with and shall wear fall arrest equipment suitable for the task at hand.
- Personnel working from temporary platforms or traveling on temporary catwalks shall have their safety lanyard secured at all time to a lifeline or structure capable of supporting 5,000 pounds.

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- Personnel working at elevations greater than 4 feet and/or 7.5 feet above the surface below shall maintain positive engagement with fall protection equipment (this means that the worker must connect to the fall arrest system on the roof or other structure prior to disconnecting from safety climb, anchor on lift basket or crane, or before stepping from a ladder to the elevated surface). This includes, but is not limited to, transitions between ladders or other devices and fall arrest systems. This positive engagement can be maintained by connecting to the fall arrest system prior to disconnecting from the ladder or other device.
- All floor openings including skylights shall be identified and guarded or protected to prevent personnel from falling into/through such openings.

7.4 EXCAVATION

- Where employees or equipment are required or permitted to cross over excavations over 6-feet in depth and wider than 30 inches, secured walkways or bridges with standard guardrails, toe boards and non-skid surface shall be provided.
- Adequate barrier physical protection shall be provided at all remotely located excavations. All wells, pits, shafts, etc., shall be barricaded or covered. Upon completion of exploration and other similar operations, temporary wells, pits, shafts, etc., shall be backfilled.

7.5 HOIST AREA (FORKLIFT CAGE)

- During hoisting operations that are conducted four (4) feet or higher above solid surface, employees shall be protected from falling by guardrails (chain gates, hinged gate, or 1/2 door) or personal fall arrest systems.
- If an employee must lean out over the edge to receive or guide equipment or materials, they shall be provided with personal fall arrest equipment (body harness, lanyards, and tie-off equipment).
- Openings associated with hoist platforms shall be kept closed when not in use.

7.6 LADDERS

- Fixed ladders greater than 20 feet in height shall be equipped with either a ladder safety climbing system or safety cage. Cages shall start at an elevation of 6 feet and shall continue to a point of 42" above the top of the upper surface.
- Portable extension ladders shall be positioned using the four to one rule. For every four feet in the height of the structure, the foot of the ladder must be located one foot away from the leading edge where the ladder contacts the roof or surface (Note: it is very important that the roof overhang is taken into account when positioning the ladder.) The ladder must be positioned using the roof upper surface contact point in determining the proper location of the ladder. Failure to do so would result in an improper ladder angle and could result in a fall and the ladder must extend a least 3 feet above leading edge to facilitate transition off and onto the ladder. Portable extension ladders shall be tied off at the top to prevent the ladder from falling. An assistant shall steady portable extension

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ladders until the ladder can be tied off. Workers transitioning to a roof or other elevated structure shall secure themselves to the fall restraint/arrest system prior to tying off or transitioning off the ladder. When using these types of ladders workers must ascend and descend using 3 point contact and ABSOLUTELY never carry equipment and/or tools when either ascending or descending. Workers must be secured to prevent accidental movement. Workers must also ensure proper height/capacity during daily pre-use inspection in accordance with manufacturer specification/instructions as outlined on a legible ladder rail.

- Portable A-frame ladders shall be set up on firm level surfaces. Workers using A-frame ladders shall not stand on the top cap or top step of the ladder for any reason. If the ladder is to short, the worker must reevaluate the task and select the proper equipment.
- Personnel climbing ladders that are not tied off at the top must have another person hold the ladder at the bottom until it can be secured (tied off at the top). This includes the last trip down after untying a ladder at the top.
- Upon climbing to the elevation where the task is to be performed, the person on the ladder shall properly secure their safety lanyard before doing anything else. Next the ladder must be tied off before work can begin. When the task is complete, the process is reversed with the safety lanyard being the last protective device released prior to descent.

7.7 SCAFFOLDING

- Scaffolds shall be provided for work that cannot be done safely by employees standing on permanent or solid construction at least 20 inches wide, except where such work can be safely done from the proper ladder.
- All scaffolds shall be erected in accordance with CCR, Title 8, Section 1637, Scaffold Design and Construction specifications.

7.8 POWERED PLATFORM

Personnel using personnel/aerial lifts, bucket trucks, scissor lifts with handrails less than 42" high, basket lifts or other enclosed elevated work platforms shall utilize a full body harness and lanyard, anchored to a designated anchor point on the equipment.

8.0 PERSONNEL LIFTS (SCISSOR LIFTS, FORK LIFTS, ETC.)

Shall be placed on solid level surfaces so as to eliminate the possibility of overturning.

9.0 AERIAL LIFTS

Personnel riding in or working from these lifts must wear a properly donned and fitted, full body harness and must secure their safety lanyard to the lift basket designated anchor point (connection point) at all times.

All manufacture instructions and specifications for equipment use must be followed.

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Personnel must ensure that they understand and utilize available clearance calculations when using a fall arrest (shock absorbing) lanyard length rather than a position/restraint or self retracting (SRL) lanyard/lifeline which doesn't require use of the fall clearance calculation because these systems are designed to either restrain the worker from ever falling (restraint/position lanyard) or SRL which limits all falls to 24 inches or less.

Also note that if a fall arrest system is used that requires a rescue plan/procedure, the plan shall be in place in conjunction with prior notification with local emergency services capable of rescue from a hang fall accident. If position/restraint lanyard, or SRL, is used the rescue plan is not required since in the event of a fall SRL using personnel will be-able to self rescue.

10.0 OTHER BUT NOT LIMITED TO:

- Other fall protection measures such as safety nets may be employed as necessary as defined specifically for working over or near water and any other locations where the danger of drowning exists (swimming pool). Such systems must meet the provisions of state laws and ANSI standards for fall protection.
- Personnel working in Confined Spaces shall wear full body harnesses and shall utilize fall arrest systems in compliance with confined space entry standards.

11.0 FALL PROTECTION SYSTEMS

In accordance with CCR Title 8, Article 24, Sections 1669-1672, the following safe work practices and regulatory requirements are the minimum standards for employee safety. The practices, procedures and equipment detailed below include but are not limited to Hazard Assessment, Personal Fall Position/Restraint/Arrest Systems, Controlled Access Zones, Safety Monitoring, Warning Lines and Guardrails.

11.1 GUARDRAIL SYSTEMS

Unless otherwise protected, railings as set forth below shall be provided for heights of 4 feet or greater on unprotected sides of elevated work locations that are not buildings or building structures (CCR Title 8, Section 3210(b) and/or 7 ½ feet or greater, a fall hazard exists off of perimeters, edges, sides, slopes, etc. of structures, CCR Title 8, Section 1670(a), or more above the ground, floor, or level underneath.

- Railings shall be constructed of wood or in an equally substantial manner from other materials, and shall consist of a top rail not less than 42 inches or more than 45 inches in height measured from the upper surface of the top rail to the floor, platform, runway or ramp level and a mid-rail. The mid-rail shall be halfway between the top rail and the floor, platform, runway or ramp.
- A standard toe-board shall be 4 inches (nominal) minimum in vertical height from its top edge to the level of the floor, platform, runway, or ramp. It shall be securely fastened in place and have not more than 1/4-inch clearance above the floor level. It may be made of any substantial material, either solid, or with openings not over one inch in greatest dimension. Toe-boards shall be provided on all open sides and ends of railed scaffolds at

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locations where persons are required to work or pass under the scaffold and at all interior floor, roof, and shaft openings.

- Guardrails are required at locations where there is a routine need for any employee to approach within 6 feet of the edge of a roof. When intermittent work is being done, an approved fall protection system or safety harness and lanyard may be provided in lieu of guardrail systems. For the purpose of this requirement, "routine need" means more than four times a year and intermittent work means work not exceeding four times a year.

11.2 PERSONAL FALL POSITION/RESTRAINT/ARREST SYSTEMS

- Effective January 1, 1998- Body Belts shall not be used as part of a fall arrest system.
- The user, prior to each use, according to the manufacturer's instructions and specifications, will inspect all approved personal fall arrest equipment. The inspection shall include examination for wear, damage and other deterioration. If during the inspection the user discovers defects or damage, the user shall immediately remove the equipment from service and destroy.
- All fall arrest systems shall be properly engineered and designed. Equipment used for fall arrest shall meet ANSI standards and shall not be used for tasks other than fall position/restraint/arrest (e.g., lifting supplies or materials). The applications of fall systems shall include the use of predetermined anchor points. Each anchor point shall be capable of supporting a static load of 5,000 lbs. (3,000 lbs. if using a position/restraint as in self-retracting lifeline (SRL)) and shall be independent of any anchorage used to support or suspend other platforms or loads. Anchor points shall be established and designed to limit the swing of an individual in the event of a fall.
- Lanyards shall be attached to anchor points, or other fall system components such as rope grabs, carabineers, anchor straps, etc. so as to limit the total fall distance. Generally this requires the lanyard to be positioned at or above head level. Where this cannot be achieved, lanyards of less than 6' in total length must be used (the total extended length of break-away straps used as deceleration devices must be considered during the fall arrest system evaluation, design and placement and be not more than 3.5 feet).
- Full body harnesses meeting ANSI standards shall be supplied and used by all personnel working at unguarded elevations greater than 4 feet and/or 7.5 feet above the surface below. The use of body belts is strictly limited to positioning devices, and shall not be used for personnel fall arrest.
- Personnel working at elevations greater than 4 feet and/or 71/2 feet above the surface below shall maintain positive engagement with fall protection equipment, if available. This includes, but is not limited to, transitions between ladders or other devices and fall position/restraint/arrest systems. This positive engagement can be maintained by connecting to the fall arrest system on the structure prior to disconnecting from the ladder or other device.
- When work is of short duration and limited exposure such as measuring, roof inspection, etc., and the time involved in rigging and installing safety devices equals or exceeds the

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performance of the designated tasks of measuring, roof inspection, etc., these provisions may be temporarily suspended provided that adequate risk control is recognized and maintained.

11.3 WARNING LINE SYSTEMS

- Consist of rope, wire or similar material, flagged with highly visible material hanging from the warning lines at approximately 6-foot intervals, and shall be installed 34 to 45 inches above the roof surface to warn employees that they are approaching the edge of the roof.
- Warning lines shall have a minimum tensile breaking strength of 500 pounds
- The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.
- The warning lines and headers shall be placed no closer than 6 feet from the roof edge.
- A qualified person shall closely supervise application of materials outside the warning lines.
- No employee, other than an employee covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system.
- Each employee working in a Warning Line zone shall be directed to comply promptly with fall hazard warnings from safety monitors

11.4 CONTROLLED ACCESS ZONES

- Where personnel are not required to work near a leading edge, a controlled access zone may be employed in lieu of a personnel fall arrest system. This controlled access zone shall be positioned no less than 6 feet from the leading edge, the cable shall be able to withstand a force of 200 lbs. and shall be positioned at a height of not less than 39 inches and no more than 45 inches from the working surface. The cable shall have flags every 6 feet. Personnel beyond the perimeter of the controlled access zone, for any reason, shall utilize a fall arrest system.
- Parapets at least 24 inches high are adequate for roofing operations where machinery is not used. Parapet walls must be 36 inches high where an operator who walks backwards pulls felt-laying machines or motorized equipment on which the operator rides is being used. This requirement also applies to contractors working on the roof.
- When used to control access to areas where leading edge and other operations are taking place, the controlled access zone shall be defined by a control line or by any other means that restricts access. Signs shall be posted to warn unauthorized employees to stay out of the controlled access zone.
- When control lines are used, they shall be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge, except when erecting pre-cast concrete members.

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- When erecting pre-cast concrete members, the control line shall be erected not less than 6 feet nor more than 60 feet or half the length of the member being erected, whichever is less, from the leading edge.
- The control line shall extend along the entire length of the unprotected or leading edge and shall be approximately parallel to the unprotected or leading edge.
- The control line shall be connected on each side to a standard railing or wall, or securely anchored on each end.
- Control lines shall consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:
    - Each line shall be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material.
    - Each line shall be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the working level/surface and its highest point is not more than 45 inches.
    - Each line shall have a minimum breaking strength of 200 pounds.

11.5 SAFETY MONITORING SYSTEMS

- Personnel working at elevations where no feasible fall arrest system has been developed or implemented, at the discretion of the supervisor, may utilize a safety monitor as the sole means of protecting an individual from a fall.
- The Safety Monitor System must be accompanied by a written plan, for each structure or situation, that clearly describes why other fall protection measures are not feasible, clearly identify and describe fall hazards, and describe measures taken to eliminate fall hazards or reduce the severity or likelihood of such falls.
- Note: This provision does NOT and must not be used as a method to relieve Ohlone College, supervisors or other personnel from the responsibility for employing proper, active fall protection systems such as personal fall position/restraint/arrest devices.
- The employer shall designate a person to monitor safety of other employees and the employer shall ensure that the safety monitor shall:
    - Be competent to recognize fall hazards.
    - Capable of warning workers when it appears that the worker is unaware of a fall hazard or acting in an unsafe manner and able to detect unsafe work practices.
    - The safety monitor must be on the same level and within visual sighting distance of the employee and shall always be close enough to communicate orally.
    - Must not engage in any other work activities or have other responsibilities, which could take the monitors attention from the worker being monitored.

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- No employee, other than an employee covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system. This is to remove distraction of the Safety Monitor.
- Each employee working in a Controlled Access Zone shall be directed to comply promptly with fall hazard warnings from the Safety Monitor.
- When the Safety Monitor System is utilized, no mechanical equipment shall be used or stored in the area where the Safety Monitor System is employed.

11.6 FALL PROTECTION MAY BE NEEDED AS FOLLOWS:

Backup Protection – In most cases, personal fall arrest equipment is designed and should serve as back-up protection, that is, it is passive until a fall occurs, at which time it either arrests the fall or acts to lower the falling person in a controlled manner. This protection must fit in with the mobility requirements of the work task to remain passive and provide continuous protection. It also must take into account other variables, such as obstructions below the workstation.

Restraint/Positioning Suspension – It is commonly referred to, as fall protection may only be a means of restraint prevention from reaching an edge or support necessary to complete the work being performed. Equipment, such as full body harness with back mounted D-ring and positioning lanyard are designed to enable workers to position themselves to prevent a fall from occurring while still enabling mobility to complete work tasks. Since this usually involves moving or repositioning the equipment, an independent backup lifeline is required. Any time a worker's balance is substituted by harness and lines, a backup fall arrest system is required. Restraint systems are particularly difficult to design because of workplace geometry and human factors. If the restraint system is to short the worker will detach near the edge; if too long, free falls can be expected; and if leaning occurs near and edge, a backup system is required.

Restraint protection shall be rigged to allow the movement of employees only as far as the exposed edges of the working level or working area.

Means of Retrieval – In certain instances, such as vertical entry into a Confined Space, fall protection equipment also can be used for emergency retrieval. When a lifeline is worn by an entrant for protection against a vertical fall hazard while entering a space, rescuers should not have to go inside the space to hook up the victim for retrieval. Also known as self-rescue system.

In some situations more than one system may be required to provide continuous fall protection for worker safety:

Transition Points

Examples:

1. An operator climbs to the top of a fixed ladder and moves across to a platform;
2. An inspector steps over an extended walkway onto the top of a tank to attach his/her lanyard to a horizontal cable;
3. A maintenance worker uses the overhead pipe for an attachment while traveling down a pipe rack until he reaches a perpendicular structural support beam.

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Too often these transitions are made without protection. Fixed ladder climbing systems should have an extension that enables the climber to move onto the guarded platform before disconnecting his climbing protection sleeve. In some applications, a double Y-lanyard, a second lanyard or lifeline system may be necessary. The objective is to not permit unprotected exposure while traveling to or returning from the workstation as well as while working.

Multiple Users – Elevated work tasks that require more than one person to complete must be planned carefully. Most horizontal lifeline systems accommodate two or more workers. Independent lifelines may be suitable depending on available anchorage points and the ability to keep the lines from entangling. For large numbers of workers, measurers such as personnel nets, perimeter cable protection, or catch platforms might be more efficient means of guarding.

Multiple Fall Hazard Control Measures – Personal fall protection equipment alone may not be adequate to provide continuous protection. A combination of fall arrest and prevention may be necessary. Aerial lifts can be used for access and personal fall protection while stationary at the elevated workstation. Workers on sloped roofs can use a combination of horizontal and vertical lifelines for two-dimensional protection.

Fundamental Grouping of worker activities at elevations:

Climbing/Traversing: Includes climbing fixed or temporary ladders as well as temporary and permanent structures (e.g., fixed ladders at the theater, buildings, temporary structures typically under construction including buildings, pre-cast concrete and roofs; and permanent structures such as pipe racks, tanks, boilers and antennas).

Mobile Work Positioning Systems: Involve the use of some type of suspension equipment to position a worker such as a winch. A backup lifeline is needed in the event of a suspension line failure or equipment collapse.

Aerial Lift: Man lifts, scissor lifts, bucket trucks, suspended platforms or workbaskets that are used to access an elevated workstation or to position work. For work positioning use of such platforms, fall protection is always needed, because workers tend to overreach, which can lead to a fall and is a requirement of the regulation when using an aerial lift/bucket truck. Aerial lifts and other platforms are sometimes stabilized by applying forces to the platform railings under a truss or next to an exit point. This can lead to weakening of the platform attachments. It is better to tie the structure together to minimize platform movement.

Horizontal Travel: Work that requires horizontal mobility, such as walking along pipe racks or elevated catwalks, and unguarded platforms or mezzanines.

Two-Dimensional Travel: Access and work can often require travel in both vertical and horizontal directions, necessitating two-dimensional protection. Work on slope roofing is an example of this.

Escape: For workers who may become trapped at elevation, an emergency means of escape vertically or at an angle away from additional hazards may be needed.

Confined Space and Retrieval: See the Ohlone College written Confined Space Program.

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12.0 FALL PROTECTION TRAINING REQUIREMENTS

13.0 FALL PROTECTION TRAINING

- All employees exposed to fall hazards shall be trained in the recognition and minimization of such hazards prior to exposure. Training shall be arranged through the Safety Coordinator or Supervisor.
- Employees will be trained in the fundamentals of fall protection in accordance with CCR Title 8, Division 1, Subchapter 4, Article 24.
- Training will be provided to ensure employees understand the purpose, function and proper use of fall protection equipment and policies. Employees acquire the knowledge and skills required for the safe application and use of fall protection equipment and applications.

14.0 TRAINING RECORDS

Completed training shall be documented with name of the course, date of the training, name of the facilitator, start and finish time and the employee's name.

15.0 FALL PROTECTION EQUIPMENT INSPECTION REQUIREMENTS

15.1 PRE-USE INSPECTION

All personal fall protection equipment must have a pre-use inspection prior to each use in accordance with the outlined procedure located in each piece of equipment user manual. This manual shall be keep for immediate reference with all fall protection equipment.

If pre-use inspection identifies personal fall protection equipment is damaged or defective, the equipment shall be immediately removed from service and eliminated from any future use until inspected and recertified by a Qualified Person.

Note: Any personal fall equipment subjected to a full impacting fall arresting load shall be immediately removed from service and destroyed or returned to the manufacturer for factory inspection and repair.

15.2 COMPETENT PERSON INSPECTION

Personal Fall Protection Equipment

All personal fall protection equipment and fall protection systems shall be documented through a detailed inspection, completed by a Competent Person every 6 months (CCR Title 8, Section 1670 (b)(19) as required in the regulation. This inspection includes but is not limited to inspection for:

- Mold damage;
- Chemical damage (acids, bases, solvents, petroleum products, etc.);
- Abrasive damage from dried concrete, resin, etc.;

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- Normal wear;
- Distortion of D-rings, clips, and buckles;
- Cut, broken, torn, frayed, scraped straps or components;
- Properly working buckles, latches, double locking snap hooks, adjustment devices, etc.;

Note: Inspection protocols and procedure document (attached separately) includes necessary checklists to ensure this documented inspection is properly completed and documented as required.

16.0 FALL PROTECTION EQUIPMENT MAINTENANCE

All personal fall protection equipment and fall protection systems shall receive maintenance specified by the manufacturer with regard to required maintenance (repair), inspection and recertification of all fall protection systems.

17.0 FALL PROTECTION AND RESCUE PLANS

17.1 FALL PROTECTION PROCEDURES

29 CFR Section 1926.502(d) (20) (Subpart M) states that when personal fall arrest systems are used, the employer must assure that employees can be promptly rescued, therefore, the employer will ensure that a sufficient number of additional, rescue trained personnel will be present onsite for any operation that requires the use of a personal fall arrest system.

18.0 RESCUE PLANS – OHLONE COLLEGE POLICIES AND WRITTEN PROCEDURES.

See Appendix C, Rescue Plan Procedures.

18.1 EMPLOYEE EMERGENCY ACTIONS

Under no circumstances shall an employee, who is not trained in fall rescue, attempt to rescue another employee who has fallen from an elevated height while using a fall arrest system and is stranded. The employer will ensure that a sufficient number of additional, rescue-trained personnel will be present onsite for any operation that requires the use of a personal fall arrest system.

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APPENDIX A – TERMS AND DEFINITIONS

Access – A means of reaching a workspace or work area.

Accessible – Within reach from a workspace or work area.

Aerial Lifts – Mechanical devices such as man lifts, man-baskets, scissor lifts and bucket trucks used for access to heights.

Aisle – A passageway for persons, elevated above the surrounding floor or ground level, such as a foot walkway (catwalk) along shafting or a walkway between buildings (tunnel).

Anchorage – A secure point of attachment for lifelines, lanyards or deceleration devices.

ANSI – American National Standards Institute.

- Web address: http://web.ansi.org/default.htm

Arresting Force – The amount of force on a worker resulting from the fall protection system stopping the fall. This usually expresses the peak force experienced during the fall arrest.

Body Belt – A simple or compound strap with means for securing it about the waist and for securing a lanyard to it.

Body Harness – Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Body Restraint System – A multiple strap that can be secured around a worker and to which he can attach to a load-bearing anchorage for travel restriction.

Buckle – Any device for holding the body belt or body harness closed around the employee's body.

Cage – A guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

CCR – California Code of Regulations.

- Web address: http://www.dir.ca.gov/

Cleats – Are ladder crosspieces of rectangular cross-section placed on edge on which a person may step to ascend or descend.

Competent Persons – Individuals knowledgeable of a manufacturer's recommendations, instructions, and manufactured components, who are capable of identifying existing, predictable, and potential hazards and with the ability to properly, identify the proper fall protection equipment required for different scenarios, and who have the authorization to take prompt corrective measures to eliminate the potential hazards.

Connector – A device, which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabineer, or it may be an integral component, part of the system (such as a buckle or

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de-ring sewn into a body belt or body harness, or a snap hook spliced or sewn to a lanyard, lifeline or self-retracting lanyard/lifeline).

Continuous Fall Protection – The design and use of a fall protection system, such that no exposure to an elevated fall hazard occurs. This may require the use of more than one fall protection system or a combination of prevention or protection measures.

Controlled Access Zone (CAZ) – An area in which certain work may take place without the use of guardrails, personal fall arrest systems, or safety nets and access to the zone is controlled.

Controlled Descent – A descent at a constant mechanically controlled rate of speed.

CFR – Code of Federal Regulations.

- Web address: http://www.osha.gov

Deceleration Device – Any mechanism, such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.

Deceleration Distance – The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

Defect – Any characteristic or condition, which tends to weaken or reduce the strength or the safety of the tool, machine, object, or structure of which it is a part.

Division – The current Division of Occupational Safety and Health or any of its predecessors including the former Division of Industrial Safety or the Division of Occupational Safety and Health Administration.

Drop Line (Vertical Safety Line) – A vertical line from a fixed anchorage, independent of the work surface, to which the lanyard is affixed.

Elevated Locations – Any area where work is performed, or employees must travel that is in excess of 7 ½ feet from the following (perimeter of a structure, unprotected sides and/or edges, leading edges, through shaft ways and openings, towers, scaffolds, ladders, sloped roof surfaces steeper that 7:12, or sloped surfaces steeper than 40 degrees). (Approved personal fall arrest, personal fall restraint or positioning systems required).

Other Elevated Locations – The unprotected sides of elevated work locations that are not building or building structures where an employee is exposed to a fall of 4 feet or more. (Guardrails required) (i.e., roof openings, glazed sides of landings, balconies, porches, platforms, runways, ramps, or other working areas as defined in Section 3207 of the General Industry Safety Orders).

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Equivalent – Alternative designs, materials, or methods to protect against a hazard, which the employer can demonstrate will provide an equal or greater degree of safety for employees than the methods, materials or designs specified in the order.

Failure – Load refusal, breakage, or separation of component parts. Load refusal is the point where the ultimate strength is exceeded.

Fall Arrest System – Is required if the risk of falling from an elevated level of 7 ½ feet or more exists. It is designed to be passive and activate only in the event that a fall occurs and is a tested device, and any necessary components that function together to arrest a free fall in such a way that the potential for injury is minimized.

The following are the main components of a Fall Arrest System:

- **Full Body Harness** – A Full Body Harness distributes the force of a fall throughout the body. It includes straps that may be secured about the worker in a manner that distributes the fall-arrest forces over at least the thighs, pelvis, waist, chest and shoulders with a means for attaching to the other components of a personal fall arrest system.
- **NOTE:** Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. A body belt is defined as a strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline or deceleration device.
- **Fall Arresting and Connective Device** – A device that is used to arrest a fall while minimizing injury to the employee and couple with elements of a personal fall arrest system.
- **Shock Absorbing Lanyard** – A flexible line of rope, wire rope or strap that generally has a connector at each end for connecting the body harness to a deceleration device, lifeline or anchorage.
- **Self-retracting Lifeline/Lanyard** – A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal employee movement and which, when sudden tension is exerted (at onset of a fall, automatically locks drum and arrests the fall.
- **Rope Grab** – A device, which attaches to a lifeline as an anchoring point that provides a means of arresting a fall.
- **Connector** – It may be an independent component of the system, such as a carabineer (an oblong ring snap hook) or it may be an integral component or part of the system (such as a buckle or D-ring sewn into a body harness), or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard, which is used to connect a lifeline/lanyard to an anchor or other element of the Fall Arrest System.
- **Anchorage or Tie-Off Point** – A secure point of attachment for lifelines, lanyards or deceleration devices. It is commonly an eyebolt on a support beam or support structure. This point must be capable of supporting 5,000 pounds per worker who may be attached to it.

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- **Snap Hook** – A connector comprised of a hook shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. The locking snap hook is self closing, has a self locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection; it requires two separate forces to open the gate; one to deactivate the gate keeper and a second to depress and open the gate which automatically closes when released; used to minimize roll-out or accidental disengagement.
- **NOTE**: As of January 1, 1998, only locking snap-hooks are permitted.

Fall Distance – The physical distance from the location of the worker's support prior to a fall and the place at which the person finally comes to a complete stop.

Fall Hazard – Any position from which an accidental fall may reasonably produce an injury.

Fall Prevention – Any means used to reasonably prevent exposure to an elevated fall hazard.

Fall Restraint System – A lanyard or device that is designed to restrain a worker in such a manner as to prevent a fall from occurring.

Free Fall – The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free Fall Distance – The vertical displacement of the fall arrest attachment point on the employee's body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

Guardrail (See Railing).

Guardrail System – A barrier erected to prevent employees from falling to lower levels.

Handrail – A rail used to provide employees with a handhold for support.

Hazard – An agent, energy or characteristic that may cause physical damage to personnel or property.

Horizontal Lifeline – A rail, wire, or synthetic cable that is installed in a horizontal plane and used for attachment of a worker's lanyard or lifeline device while moving horizontally; used to control dangerous pendulum-like swing falls.

Ladder – A device other than a ramp or stairway, designed for use in ascending or descending at an angle with the horizontal. A ladder is intended to be stationary while in service and consists of two sidepieces called side rails, joined at short intervals by crosspieces called steps, rungs or cleats.

Ladder, Extension – A ladder consisting of two or more sections, with guides or brackets so arranged that the ladder may be adjusted to different lengths by sliding and locking the movable section or sections.

Ladder, Fixed – A ladder permanently fastened to a structure.

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Ladder, Job-built – A ladder that is fabricated by employees, typically at the construction site, and is not commercially manufactured.

Ladder, Single-rail – A portable ladder with rungs, cleats, or steps mounted on a single rail instead of the normal two rails used on most other ladders.

Ladder, Portable – A ladder, not permanently fixed in place, which may be used at various locations.

Ladder, Stepladder – A ladder having treads and so constructed as to be self-supporting.

Ladder, Steps – Rungs, treads, or cleats.

Ladder, Step Stool – A self-supporting, collapsible, portable ladder, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The rails may continue above the top cap.

Ladder, Trestle or "A" – Ladder consisting of two special, single ladders hinged together at the top to form equal angles with the surface on which they stand.

Ladder, Extension Trestle – A ladder consisting of an "A" or trestle ladder with an additional single ladder, which is supported in a vertical position by the "A" ladder.

Ladder, Double Cleat – A ladder that is similar to a single cleat ladder, but is wider, with an additional center rail which will allow for two-way traffic for workers in ascending and descending.

Lanyard – A flexible line to secure a wearer of a safety belt or harness to a drop line, lifeline, or fixed anchorage.

Leading Edge – The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as a deck), which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Lifeline – A horizontal line (i.e., catenary line) between two fixed anchorages, independent of the work surface, to which the lanyard is secured either by tying off or by means of a suitable sliding connection. For the purposes of these orders, lifelines may be vertical as well as horizontal (i.e., when used with a body harness).

Linemen's Body Belt – Leather or web (cotton or nylon) belt designed specifically for employees working on poles. It consists of a waist belt, generally cushioned, with a front buckle, two D rings for attaching safety straps and a multiple-looped strap for holding, rings, snap-hooks, holsters and other tool holding devices.

Mid-rail – A rail approximately midway between the top rail and platform, that is secured to the uprights erected along the exposed sides and ends of platforms.

NIOSH – National Institute for Occupational Safety and Health.

- **Web address**: http://www.cdc.gov/niosh

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Opening – An opening in any floor or platform that is 12 inches or more in the least horizontal dimension. It includes: stairway floor openings, ladder way floor openings, hatchways and chute floor openings.

Personal Fall Arrest System – A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.

- As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Personal Fall Restraint System – A system used to prevent an employee from falling. It consists of anchorages, connectors, body belt or body harness. It may include, lanyards, lifelines, and rope grabs designed for that purpose.

Personal Fall Protection System – A personal fall protection system includes personal fall arrest systems, positioning device systems, fall restraint systems, safety nets and guardrails.

- **NOTE:** Effective January 1, 1998 – Body Belts shall not be used as part of a fall arrest system.

Personal Protective Equipment – Protection where modified by the words head, eye, body, hand, and foot, as required by the Orders in Subchapter 4, means the safeguarding obtained by means of safety devices and safeguards of the proper type for the exposure, and of such design, strength, and quality as to eliminate, preclude, or mitigate the hazard.

Positioning Device System – A body belt or body harness system rigged to allow an employee to be supported on an elevated surface, such as a wall, and work with both hands free while leaning.

Qualified Engineer – An individual with a degree from an accredited institution or professional certificate who is capable of design, analysis, evaluation, specification and system safety planning in the area needed for fall protection.

Qualified Person, Attendant or Operator – A person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, and/or is properly licensed in accordance with federal, state, or local laws and regulations and who has special knowledge, training or experience in the areas needed for fall hazard control.

Railing – A barrier consisting of a top rail and a mid-rail secured to uprights and erected along the exposed sides and ends of platforms.

Roll-Out – The unintentional disengagement of a snap hook caused by the gate being depressed under torque or contact while twisting or turning; the reason locking gate keepers are now required.

Rope Grab – A deceleration device, which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

Runway – An elevated passageway.

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Safety Belt or Harness – A device specifically for the purpose of securing, suspending, or retrieving a worker in or from a hazardous work area.

Safety Factor – Ratio of the ultimate breaking strength of a member or piece of material or equipment to the actual working stress or safe load when in use.

Safety Line – One that is provided to protect a worker from falls caused by failure of scaffolds, working platforms, or loss of balance, and shall extend to within 4 feet of ground or other stable surface.

Safety-Monitoring System – A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

Self-Retracting Lifeline/Lanyard – A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Scaffold – Any temporary, elevated structure used for the support of a platform.

- **Note**: The term "scaffold" is used with inclusion of the platform and all supporting members when reference is made to loading factors.

Shock Absorbers – A component of fall protection systems that dissipates energy by creating or extending the deceleration distance.

Snap-hook – A connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object.

Structural Competence – The ability of the machine and its components to withstand the stresses imposed by applied loads. The placement of an anchor point to provide 5,000 pounds of arresting strength.

Swing Fall – A pendulum-like motion that can result from moving horizontally away from a fixed anchorage point and falling. Swing falls generate the same amount of energy as a fall through the same distance vertically but with the additional hazard of colliding with an obstruction other than the ground.

Tie-Off – The workers actively securing the end of a lanyard to an anchorage point. Anchorage points are sometimes referred to as tie-off points.

Toe-board – A barrier secured along the sides and ends of a platform at the platform level used to guard against the falling of material.

Unprotected Sides and Edges – Any side or edge (except at entrances to points of access) of a walking/working surface, (e.g., floor, roof, ramp, or runway where there is no wall or standard guardrail or protection provided).

Wall opening – A gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which employees can fall to a lower level.

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APPENDIX B – INSPECTION FORMS

STEP LADDER INSPECTION FORM

Date: _____ **Inspector:** _____

Fiberglass ☐ Aluminum ☐

		Yes	No
Steps:	Loose, Cracked, Bent or Missing.	☐	☐
Rails:	Cracked, Bent, Split or Frayed Rail Shields.	☐	☐
Labels:	Missing or Not Readable.	☐	☐
Top Cap:	Cracked, Loose or Missing.	☐	☐
Pail Shelf:	Loose, Bent, Missing or Broken.	☐	☐
Spreader:	Loose, Bent or Broken.	☐	☐
General:	Rust, Corrosion or Loose.	☐	☐
Other:	Bracing, Shoes, Rivets.	☐	☐

Actions Items: _____

_____

_____

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EXTENSION LADDER INSPECTION FORM

Date: _____ **Inspector:** _____

Fiberglass ☐ Aluminum ☐

		Yes	No
Rungs:	Loose, Cracked, Bent or Missing.	☐	☐
Rails:	Cracked, Bent, Split or Frayed Rail Shields.	☐	☐
Labels:	Missing or Not Readable.	☐	☐
Rung Locks:	Loose, Bent, Missing or Broken.	☐	☐
Hardware:	Missing, Loose or Broken.	☐	☐
Shoes:	Worn, Broken or Missing.	☐	☐
Rope/Pulley:	Loose, Bent or Broken.	☐	☐
General:	Rust, Corrosion or Loose	☐	☐
Other:	Bracing, Rivets.	☐	☐

Actions Items: _____

_____

_____

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SPECIALTY LADDER & SCAFFOLD INSPECTION FORM

Date: _____ **Inspector:** _____

Fiberglass ☐ Aluminum ☐

		Yes	No
Steps/Rungs:	Loose, Cracked, Bent or Missing.	☐	☐
Rails:	Cracked, Bent, Split or Frayed.	☐	☐
Labels:	Missing or Not Readable.	☐	☐
Hardware:	Missing, Loose or Broken.	☐	☐
Fasteners:	Rust, Corrosion, Loose or Missing	☐	☐
Top Cap:	Cracked, Loose or Missing.	☐	☐
Spreader:	Loose, Bent or Broken.	☐	☐
Outriggers:	Missing, Rust, Corrosion or Loose	☐	☐
General:	Rust, Corrosion or Loose.	☐	☐
Hinges:	Loose, Bent or Missing.	☐	☐
Locks:	Loose, Bent, Broken or Missing.	☐	☐
Bracing Front/Rear:	Loose, Bent, Broken or Missing.	☐	☐
Rivets:	Rust, Corrosion, Loose or Missing.	☐	☐
Shoes:	Worn, Broken or Missing.	☐	☐
Platform:	Loose, Bent, Broken or Loose.	☐	☐
Rail Shield:	Missing or Loose.	☐	☐
Shoulder Bolt:	Rust, Corrosion or Loose.	☐	☐
Casters:	Rust, Corrosion or Loose.	☐	☐

Actions Items: _____

_____

_____

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APPENDIX C – RESCUE PLAN PROCEDURES

In order to ensure that emergency rescue services are available, each Manager/Supervisor must develop and have in place a Rescue Plan, Standard Operating Procedure. The rescue plan shall provide the following information:

1. The Facility Identification/Location.
2. Identified Work Task Hazards.
3. Facility Access Equipment (i.e., fixed ladders, platforms, hatches, bridge members, stairways, portable ladders, harnesses, lanyards, self-retracting lifelines, rescue retrieval life line, rescue retrieval winch, protective systems, etc.).
4. Nearest manor intersection and written route directions to the facility.
5. The name of the Local Fire Department/Emergency Medical Services.
6. The phone number of the Local Fire Department/Emergency Medical Services.
7. An indication if the Local Fire Department/Emergency Medical Services requires prior notification.
8. An estimate of how long it will take the Local Fire Department/Emergency Medical Service to respond.
9. An indication if the Local Fire Department/Emergency Medical Services will need safety equipment.

In order to develop the Rescue Plans, the Manager/Supervisor or their representatives should contact the Local Fire Department/Emergency Medical Service for the area where each Facility is located. Although it is not required, it is highly recommended that the Manager/Supervisor or their representative actually visit the Local Fire Department/Emergency Medical Services.

When contacting or visiting the Local Fire Department, Emergency Medical Services, the following information is helpful in determining if they can provide or has the capabilities to provide proper rescue services.

1. An area map indication the location of the facility. During your visit with the Local Fire Department/Emergency Medical Service, They can verify if the facility is within their responding area , and know where it is and how to get to that location.
2. Pictures of and information, (hazard assessments, etc.) (i.e., height, size, fall systems, ladder's, etc.) regarding the facility work hazards that they could be expected to perform a rescue from, so they can better determine if they can perform a rescue.
3. An equipment bag containing the required protection equipment your employees use as well as any other protection equipment necessary for project work. You may need to explain to the Local Fire Department/Emergency Medical Service how the device(s) is to be used, as they may need to use the device(s) as part of their rescue.

The purpose of contacting or visiting the Local Fire Department/Emergency Medical Service is to discuss their rescue capabilities and to finalize the Rescue Plan(s). The following is a

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recommended list of questions to ask the Local Fire Department/Emergency Medical Service, which will help in developing the Rescue Plan.

Coordination Call Information/Documentation:

Name of who coordinated/contacted this plan with the Local Fire Department/Emergency Medical Service Agency: _____

Name and Title of whom you spoke to: _____

Date: _____ Time: _____

Is the Local Fire Department/Emergency Medical Service a full time responding agency?	Yes	No	
Does this service provide the type of rescue needed (capability)?	Yes	No	
Would they provide rescue to use if called upon?	Yes	No	
What phone number should we call to report such an emergency?	Yes	No	
Would they prefer prior work project notification?	Yes	No	
If yes, what phone number should we call to notify you?	Yes	No	
Using the map, have them indicate which facilities they would service.	All	Some	None
For each facility in the service area, ask how long it would take the Emergency Medical Service to respond/arrive?	Minutes:_____		
What would happen if we called with an emergency and they were on another emergency call? _____ _____			
How many members are trained in this type of rescue?	All	Some	None
Do members have the necessary rescue equipment?	Yes	No	
Would you like to conduct a rescue training exercise at one of our facilities?	Yes	No	
It is highly recommended that representative from the Local Fire Department/ Emergency Medical Service visit the facility themselves and if possible, actually conducts a rescue training exercise from your facility(s).	Yes	No	

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EMPLOYEE EMERGENCY ACTION

Under no circumstances shall an employee, who is not trained in fall, confined space, or excavation cave-in rescue attempt to rescue another employee. Depending on the situation an/or circumstances, employees can take some emergency actions in response to an accident.

1. First and foremost, an employee who has observed the accident should immediately contact the Local Fire Department/Emergency Medical Service responsible for emergency response.
2. The employee contacting the Local Fire Department/Emergency Medical Service should be prepared to provide them with the following information:
    a. A phone number where they can be contacted.
    b. The location of the facility (street address, specific directions).
    c. The number of injured employees and the nature of the injuries if known.
    d. The nature of the emergency (fall from 25 feet, ladder, unconscious, broken leg/arm, bleeding, excavation cave-in, confined space, etc.).
    e. If the injured employee is stranded or disabled what are the circumstances (location, bottom of a vault, rooftop, tank, bridge, underneath soil, etc.).
    f. Other hazards: electrical, sump water, atmospheric, sewage, etc.

Note: All employees prior to the work project should review this information.

3. If an employee has fallen, stranded or disabled, the employee that observed the incident/accident should continue to speak to the injured person (if conscious). If their alertness decrease/stops, emergency situation has increased from being serious to critical.
4. The attending employee should administer first aid/CPR and proceed with immediate implantation of the specific onsite rescue plan/procedures if they have been properly trained.

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APPENDIX D – FALL HAZARD ASSESSMENTS

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